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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,173	02/15/2002	Brady D. Esch	CARDE.59561	9523

7590 04/21/2005

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EXAMINER

TRUONG, KEVIN THAO

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/077,173

Applicant(s)

ESCH ET AL.

Examiner

Kevin T. Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendt. and Terminal discl. 09/27/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 and 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Macoviak et al. (U.S. 6,139,517).

Macoviak et al discloses in figures 13, 14a, and 14b, an elongated catheter shaft (294) with a perfusion lumen extending therethrough and an arch flow divider (292) mounted on the distal end of said shaft (294) which includes three flow-through orifices (298), wherein said shaft (294) having an inflation lumen (col. 7, line 50) for inflating the balloons (204,206), wherein the lumen (296) of the flow divider (292) is in communication with corporeal circulation while the lumen of the catheter (294) is in communication with the aortic arch vessel; wherein Macoviak et al device can be inserted either through an aortotomy incision (see fig. 5 and col. 12, line 50) or fig. 13; wherein the flow-through orifices (298) are capable of having the diameter as claimed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7-11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Macoviak et al '517 in view of Bresnaham (U.S. 6,117,105).

As to claims 7-11, Macoviak et al discloses substantially as claimed except for the catheter shaft comprises a corporeal perfusion port.

However, Bresnaham discloses another type of aortic flow divider with aortic arch vessel perfusion ports and inflatable members. Bresnaham teaches that such a device can include a corporeal perfusion (324, with a fluid flow ratio as claimed) in addition to arch perfusion ports (326) as shown in fig. 24 and 25 and furthermore, Bresnaham also teaches that a separate corporeal perfusion lumen (308) can be provided in addition to the arch perfusion lumen (310) (col. 14, lines 46-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a corporeal perfusion lumen and port in the Macoviak et al device as taught by Bresnaham in order to enhance the capability of such device when it is in use.

As to claim 16, Macoviak et al fails to reinforce the shaft with a wire coil.

However, Bresnaham teaches that a catheter shaft can be reinforced with a coiled wire to improve the stability of the catheter shaft in the proper position in the patient's aorta (col. 14, lines 40-43).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include reinforce the Macoviak et al catheter shaft

(294) with a coiled wire as taught by Bresnahan in order to improve the stability of the catheter shaft while it is positioned within the patient's aorta.

Terminal Disclaimer

The terminal disclaimer filed on 09/27/2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent 6,371,935 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin T. Truong whose telephone number is 571-272-4705. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:00 PM..

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin T. Truong

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Primary Examiner
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ktt